Attorney Docket No. P21932In re application of M. FRYDA et al.Serial No. 10 030.133

Group Art Unit: 2882

Filed January 25, 2002

Examiner: Unknown

For X-RAY ANODE AND PROCESS FOR ITS MANUFACTURE

THE COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

Sir:

Transmitted herewith is a Preliminary Amendment in the above-captioned application.

☐ Small Entity Status of this application under 37 C.F.R. 1.9 and 1.27 has been established by a previously filed statement.

☐ A verified statement to establish small entity status under 37 C.F.R. 1.9 and 1.27 is enclosed.

☒ An Information Disclosure Statement, PTO Form 1449, and references cited.

☐ No additional fee is required.

The fee has been calculated as shown below:

Claims After Amendment	No. Claims Previously Paid For	Present Extra	Small Entity		Other Than Small Entity	
			Rate	Fee	Rate	Fee
Total Claims: 25	*20	5	x 9=	\$	x 18=	\$90.00
Indep. Claims: 2	**3	0	x 42=	\$	x 84=	\$0.00
Multiple Dependent Claims Presented			+140=	\$	+280=	\$0.00
Extension Fees for Month				\$		\$0.00
Total:				\$	Total:	\$90.00

*If less than 20, write 20

**If less than 3, write 3

☐ Please charge my Deposit Account No. 19-0089 in the amount of \$_____.

☒ A Check in the amount of \$90.00 to cover the filing fee is included.

☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Matthias FRYDA et al.)
) Group Art Unit: 2882
Appln. No. : 10/030,133)
) Examiner: Unknown
Filed : January 25, 2002)
)

O I P E For : X-RAY ANODE AND PROCESS FOR ITS MANUFACTURE

INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 C.F.R. Sections 1.56, 1.97, and 1.98, Applicants hereby submit the following documents for the Examiner's consideration.

Applicants submit herewith a German Office Action dated June 30, 2000 issued in connection with German Patent Application No. 199 34 987.8, which is a counterpart of the instant application. In particular, the German Examiner cited the following:

- (1) European Patent Application No. 0 432 568; and
- (2) German Patent Application No. 195 44 203.

Further, Applicants note that the German Examiner noted the following with regard to the cited documents:

An x-ray tube is known from reference 1) (cf. especially Fig. 1 with

The subject matter according to present claim 1 is thus anticipated by the prior art according to 1).

Consequently, claim 1 is not allowable.

II

Claims 2 through 16 are not allowable either because they relate to claim 1 which is not allowable.

The additional features of the subject matter of the application according to dependent claims 2, 3 and 6 through 10 can also be taken as known from reference 1).

As far as dependent claims 4 and 5 are concerned, although—at a maximum of 45 micrometers—the diamond window disclosed in 1) is thinner than that claimed by the applicant, it is naturally within the discretion of one skilled in the art to increase the thickness of the window according to the relevant requirements, e.g., compression strength, filter effect, etc.

It is likewise within the scope of one skilled in the art to apply expensive anode material according to dependent claim 11 only to those parts of the window actually impacted by electrons.

The additional features of the subject matter of the application according to dependent claims 12 through 16 could not be verified as known; however, it can be assumed that the inadequate adhesive properties of metals on diamond are known to one highly qualified and skilled in the art under discussion here and that he is able to take suitable countermeasures. It is likewise in the interest of one skilled in the art to use sensors to monitor a thermally highly stressed component, such as the anode of an x-ray tube is known to be.

A new main claim substantiated by the features of dependent claims 2 through 16 would therefore presumably not be allowable either due to the lack of novelty or the lack of inventiveness of its subject matter.

As far as independent process claim 17 is concerned, it is already known from reference 1) (cf. column 4, lines 25 through 27) to produce the diamond layer by means of chemical vapor deposition. Regarding the two independent use claims 21 and 21 [sic.] it should be stated that the x-ray tubes disclosed in 1) are used in x-ray equipment and—since they are embodied as so-called microfocus tubes—in particular in x-ray microscopes.

For the sake of completeness, reference is also made to reference 2).

In view of the proven prior art, a patent cannot be issued for the present application; instead a rejection of the application is to be anticipated should this set of claims is pursued further.

Applicants further submit herewith copies of the following documents which were discussed in the instant application:

(3) U.S. Patent No. 5,173,612 issued to Imai et al. December 22, 1992, which is discussed in the instant application beginning in paragraph [0004].

Applicants further submit herewith a copy of a International Search Report dated December 6, 2000 conducted in PCT/EP00/07076 of which the present application is a U.S. National Stage Application. In particular, the International Examiner cited:

(4) U.S. Patent Application No. 4,159,437, issued to Sahores June 26, 1979, as a "Y" category document (i.e., a document that calls into question the inventive step when considered with another document from this category). In particular, the International Examiner noted the abstract as relevant to claims 1-15 and 17-22 of the International Application. This document was also cited as an "A" category document

particular, the International Examiner noted column 4, lines 6-44 as relevant to claim 16 of the International Application;

(5) U.S. Patent Application No. 4,583,243, issued to Diemer et al. April 15, 1986, as a "Y" category document. In particular, the International Examiner noted column 3, lines 32-40 as relevant to claims 1 and 17 of the International Application. This document was also cited as an "A" category document. The International Examiner noted this document as relevant to claim 16 of the International Application;

(6) U.S. Patent Application No. 5,173,612, issued to Imai et al. December 22, 1992, as a "Y" category document. In particular, the International Examiner noted column 1, line 65 - column 2, line 20 and figure 1 as relevant to claims 1-15 and 17-22 of the International Application. This document was also cited as an "A" category document. In particular, the International Examiner noted column 5, lines 31-63 as relevant to claim 16 of the International Application. Applicants note that this document correspond to item (3) above. For the Examiner's convenience, Applicants submit herewith a copy of U.S. Patent No. 5,258,091 issued to Imai et al. November 2, 1993, which is identified by the annex to the search report as a U.S. Patent family member of the above-listed document;

(7) European Patent Specification No. 0 676 772 B1, published October 11, 1995,

abstract as relevant to claims 1 and 17 of the International Application. This document was also cited as an "A" category document. In particular, the International Examiner noted column 2, line 19 - column 3, line 27 and figure 1 as relevant to claim 16 of the International Application; and

(8) European Patent Application No. 0 432 568 A2 published June 19, 1991, as a "Y" category document. In particular, the International Examiner noted column 3, lines 15-30, column 4, lines 10-17 and figure 1 as relevant to claims 1-15 of the International Application. Applicants note that this document correspond to item (1) above.

Copies of the above-listed documents (including the International Search Report and German Office Action) are enclosed as is a completed copy of the PTO-1449 Form listing these documents. Accordingly, the Examiner is requested to consider these documents and to indicate such consideration by returning a signed and initialed copy of the PTO-1449 Form with the first official communication.

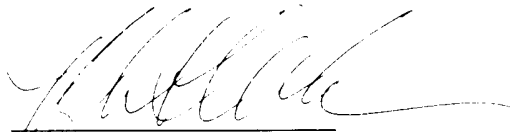
Applicants note that while this Information Disclosure Statement is being filed more than three months from the date of filing, Applicants have not received a first action on the merits from the U.S. Patent and Trademark Office. Accordingly, consideration of the enclosed documents is requested under 37 C.F.R. 1.97(b)(3).

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this Information Disclosure Statement, Applicant hereby authorizes the Commissioner to charge any fees necessary to ensure consideration of the documents cited herein to Deposit Account No. 19-0089.

Should there be any questions or comments, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
Matthias FRYDA et al.



Neil F. Greenblum

Reg. No. 28,394

EA 35. 4/3

May 14, 2002
GREENBLUM & BERNSTEIN, P.L.C.
1941 Roland Clarke Place
Reston, VA 20191
(703) 716-1191